

REMARKS

Claim 16 has been amended to call for a semiconductor substrate and a semiconductor memory device.

Claim 21 included a similar kind of limitation and was rejected based on either Ichihara or Mizuuchi. However, both of these references basically cover optical disks like DVD disks. They are not semiconductor memories and they do not work as semiconductor memories. Thus, the basis for the application of these references under Section 102 is hard to understand.

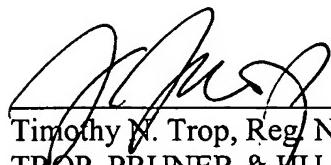
While a Section 103 rejection might be fashioned that combines a phase change semiconductor memory with these references, it is not seen what the rationale to combine or modify would be. There is no reason to believe that there would be any desirability to having the claimed features in a semiconductor memory based on anything that one might learn from an optical disk.

An attempt to combine an optical disk and phase change memory was made with respect to claim 23. However, the total rationale was that it would be obvious to make the combination “to carry out an initial crystallization chalcogenide material as taught by Horie.” But, of course, one can carry out a crystallization material without reducing the crystallization size or crystallization speed. Nothing teaches any benefit to either of these features or any reason to believe that the incorporation of elements, which was only briefly mentioned in the two cited optical disk patents, would have any help or bearing in the semiconductor memory area. This is especially so since the optical disk patents simply mention constituents without explanation for why they are included.

With respect to the rejection of claim 24, it is noted that it does not appear that any titanium containing layer is “under the chalcogenide material.” For example, in connection with Figure 2 of the Mizuuchi reference, the recording layer is 411 and the layer suggested to have titanium is the layer 3, clearly above the recording layer. Likewise, in Figure 2, the reflective layer 106 is over the recording layer 105 in Ichihara. Thus, the rejection of this claim should be reconsidered.

In view of these remarks, the application should now be in condition for allowance.

Respectfully submitted,



Timothy N. Trop, Reg. No. 28,994
TROP, PRUNER & HU, P.C.
1616 South Voss Road, Suite 750
Houston, TX 77057-2631
713/468-8880 [Phone]
713/468-8883 [Fax]

Attorneys for Intel Corporation